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CH2MHILL

March 6, 1998

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Mr. Michael McAteer, WAM (5HSRL-6J)
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

Dear Mr. McAteer:

Subject: Monthly Progress Report No. 2
CH2M HILL/E&E Oversight of Remedial Action (RA) Activities
Enviro-Chem Superfund (ECC) Site, Zionsville, Indiana
WA No. 008-ROBF-0530, Contract No. 68-W6-0025

Enclosed is a copy of Progress Report No. 2 for the February 1998 reporting period and the corresponding photographic log.

Please call me at (513) 762-7605, if you have any questions.

Sincerely,

CH2M HILL

Tim Harrison
Site Manager

CIN/PR02
Enclosure
c: Stephen Nathan/PO/USEPA; 5HSM-5J (w/o enclosure)
Peggy Hendrixson/CO/USEPA; 5MCC-10J (w/o enclosure)
Ike Johnson/PM/MKE
Al Erickson/RTL/MKE
Dan Lynch/Environment & Ecology
Gail Gill/AA/MKE

ECC RA Oversight Progress Report No. 2 (February 1998)

CH2M HILL Remedial Action (RA) Oversight Observation

This is the second RA oversight progress report submitted by CH2M HILL for RA activities done at the Enviro-Chem (ECC) Superfund Site in Zionsville, Indiana. This progress report covers the period from February 1 to February 28, 1998.

Versar Inc., the ECC Trust's (Trust) prime remediation contractor, and several subcontractors performed field activities during the reporting period. Danny Lynch/Ecology and Environment, Inc. (CH2M HILL subcontractor) conducted full-time oversight at the ECC site at the request of U.S. EPA. On February 11, M. McAteer/USEPA, T. Harrison/CH2M HILL, and V. Epps/IDEM visited the site and had an informal meeting with the Trust's engineer and contractor to discuss site activities.

Progress Made by Trust's Contractor This Reporting Period

The line items below list the status of a particular remediation task identified in the Trust's Project Schedule dated December 19, 1997.

1-31. Pre-Design Activities—These line items were all completed prior to this reporting period with the exception of items 20 and 29 as discussed below.

20. RCRA Standards Submittal (by Trustees)—Trust submitted proposed RCRA Clean Closure standards to U.S. EPA in mid-January. Proposed standards are under review by U.S. EPA and IDEM.

29. Award Subcontracts—Several subcontracts were awarded prior to this reporting period (e.g., tank and building erection, earthmoving, electrical), but other subcontracts such as mechanical have not been awarded.

31-39. Pre-Mobilization Activities—These items included obtaining building permits, installing trailers (office and decon), phone utilities, and power service (to trailers and process building). Potable and gray water tanks were brought on site, and plumbing of the decon tanks was completed during this reporting period. All other pre-mobilization activities were completed prior to this reporting period.

40-42. Mobilize Site— The construction facilities setup and site surveys were completed prior to this reporting period.

43. Construct Perimeter Roads—This item is in progress, but behind schedule. Roads have been "roughed in" but are not final based on specifications. This is not a critical path issue and has been delayed while Trust address critical path issues.

44. Clean and Repair Erosion Ditches—This item has not been initiated during reporting period and is behind schedule. This is not a critical path issue and has

been delayed while Trust addresses critical path issues.

45. Install Culvert System—This item has not been initiated during reporting period and is behind schedule. This is not a critical path issue and has been delayed while Trust addresses critical path issues.

46. Perform Test Borings in the South Concrete Pad— Test borings were completed on the south concrete pad during this reporting period. The report has not yet been issued.

47-51. South Concrete Pad Area— These items are in progress, but have not been completed and are a few weeks behind schedule. These activities, which include grouting of the "ECC sump" and determination of safe excavation depth, are critical path items and are discussed in more detail in the Problem Areas section below.

52-59. Treatment Systems— These items are all related to erection of the treatment process building that was completed prior to this reporting period.

60. Erect Four Tanks with Liners— The contractor completed assembly of the four tank (T1, T2, T3 and T4) outer metal shells prior to this reporting period. Liner installation was completed in all four tanks this reporting period. This activity was hampered by rain and wind making the seaming of the liners difficult and at times impossible. The floating cover for tank #2 was returned to the factory for seaming.

    Hydrostatic leak testing was conducted on tanks #1 and #3. There is some water present at the leak detection drains of both tanks but it is currently unclear if the water is from liner leakage or pre-existing water in the geotextile intermediate layer. The Trust's engineer is developing liner acceptance criteria. A specifications non-compliance issue regarding the tank liners is discussed below in the Problems Section.

61. Set Equipment— Some treatment process equipment was received during the reporting period. All remaining process equipment is expected to be received next reporting period. No equipment has been installed in the treatment building yet.

62. Pipe— The pipe rack and manifold were constructed between tanks #1 and #2. Installation for the rack between tanks #3 and #4 and process equipment piping remains to be completed.

63. Wire— The wiring of the process building, tank power and control, and 480-volt power has started and will continue during the next reporting period.

Problems Resolved by the ECC Trust's Contractor

1. A conflict was noted in the technical specification for the fabrication of the tank liners. The liners were to be factory fabricated in one piece. The liners were delivered to the site in two pieces per each tank. The installation required field welding of the liner bottom to the liner sidewall. Trust's engineer and contractors developed field fabrication specifications and QA/QC procedures that prevented the tank liner subcontractor from having to shop weld the liner bottoms to the sidewalls. Shop welding the liners was expected to have significantly delayed the project schedule.

2. Surface water that was ponded on the southern concrete pad was pumped into three onsite fractionation tanks to allow for geotechnical borings on the pad. The water in the fractionation tanks was then pumped to process wastewater tank#1 using a flexible hose. There were some minor water leaks onto the southern pad from the hose connections during the transfer. The Trust's engineer had some concern about pumping subsurface water (drilling water, decon water and water from the planned pump test) in this manner. The contractor installed a permanent PVC pipe in place of the hose to prevent further leaks.

3. A temporary sump made of 8" PVC pipe was installed on the leak detection drain of tank #1 to collect seepage from between the tank liners. The sump collected water while the water transferred from the fractionation tanks to tank #1 is being held. A sump pump was installed in the sump and was used to keep the level in the sump below grade to minimize hydraulic head from developing between the tank liners. Water that collected in the sump was pumped directly back into tank #1.

Problem Areas Remaining

1. Versar cannot locate the 20-foot x 20-foot x 12-foot "ECC sump" under the concrete pad that was identified during remedial investigations. The Trust is concerned that the sump is hydraulically connected to artesian source of water that will continue to produce water during dewatering and excavation activities. As a result, they intend to grout the sump. An EM survey of the south concrete pad was conducted but did not reveal the location of the sump. The Trust propose to locate and grout the sump during excavation of the southern concrete pad area when they expect to have the proper heavy equipment onsite to grout the sump. This is not currently a critical path item.

2. The ECC Trust has not come to an agreement with the Bankerts regarding the use of the "borrow area" soils to use as backfill material for the southern concrete pad area excavation. The Trust has requested that Versar investigate alternative sources of backfill materials if negotiations with the Bankerts over the borrow area material proves unsuccessful.

3. During geotechnical drilling of the southern concrete pad area, the Trust discovered on area of high VOCs (based on PID readings of the soil using an OVM) that they did not anticipate. The high VOCs were found in the southwest corner of the site in split spoon samples from geotechnical borings G-16-98 and G-17-98 (15-25 feet bgs). This area was not intended to be remediated by the Trust under the current remedial design. The Trust is currently evaluating the situation and discussing a remedial approach with U.S. EPA and IDEM. Impact on the project schedule and scope was not determined this reporting period but is the most critical schedule item for the next reporting period.

4. There is water discharging into the leak detection drains of both tank #1 and tank #3. It has not been determined whether this discharge is "construction water" trapped between the liners during fabrication or a leak from the liner in contact with the contents of the tank. Specifications for a maximum acceptable leakage rate and for the actions to be taken if the maximum leakage rate is exceeded are being developed by the Trust.

Trust's Activities Planned

The following activities are expected to begin, or be completed, during the next reporting period based on Versar's current project schedule. The line items below list the status of specific remediation line items identified in the Trust's Project Schedule dated December 19, 1997.

20. RCRA Standards Submittal (by Trustees)—Agreement between Trust, U.S. EPA and IDEM on appropriate Indiana RCRA Clean Closure Criteria to be applied to excavation of the southern concrete pad area.

43. Construct Perimeter Roads— Complete construction of the interior site access road.

44. Clean and Repair Erosion Ditches—Initiate and complete construction of site erosion ditches per the specifications.

45. Install Culvert System—Initiate and complete construction of the site culvert system.

46-51. South Concrete Pad Area—Complete the concrete pad area geotechnical investigation and results report. Versar also expects to locate and grout the "ECC sump."

60. Erect Four Tanks with Liners—Complete hydrostatic test of tanks #2 and #4.

61-64. Process Building Equipment—Continue setting SVE and wastewater treatment process equipment and ancillary plumbing and wiring of the process building. Functional testing of some equipment is also expected.

73-86. North Treatment Area Phase I (Existing Soil)—Begin and complete installation of the north treatment area (existing soil) SVE system. This includes clearing area, crushing concrete building slabs, excavate SVE trenches, add stone aggregate to trenches, laying SVE piping in trenches, backfill trenches, installing impermeable liner, and air monitoring. This was scheduled to start during this reporting period but was delayed.

87-93. South Concrete Pad Area—Begin and complete preparing for excavation of southern concrete pad area including clearing area, installing dewatering well points, demolishing and crushing concrete pad, excavating and stockpiling subbase. This was scheduled to start during this reporting period but did not.

94. Install East Zone Sheet Pile Cutoff Wall—Begin installation of southern concrete pad area sheet pile along east wall. This was scheduled to start during this reporting period but did not.

95-109,114-115.

South Concrete Pad Area - These items are related to the later stages of the excavation of the south concrete pad. They are shown on the existing schedule as to begin during the next reporting period. However, due to the expected schedule delays it is unlikely if these line items will occur during the next reporting period.

Other line items shown on the contractor schedule are expected to take place after the next reporting period and are therefore not included in this report.

ECC Trust's Schedule Status

Based on the schedule dated December 19, 1997, it appears that progress is about 3 to 4 weeks behind schedule at the end of the reporting period. The Trust's contractor has acknowledged schedule delays. A revised schedule has not been presented but is expected to be submitted by the Trust to U.S. EPA during the next reporting period after a strategy for addressing identified VOCs in the extreme southwest corner of the site has been developed by the Trust.